What is UPlan?
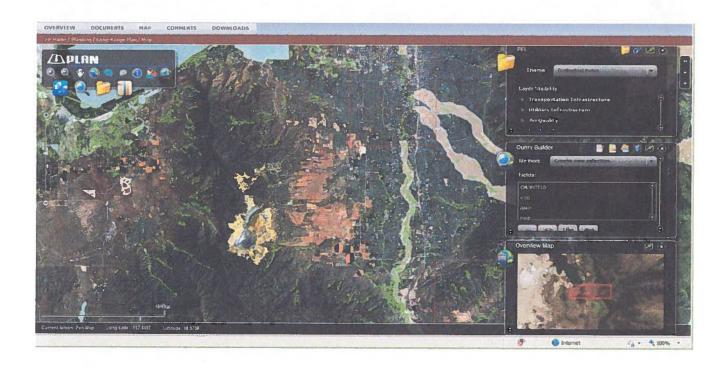
UPLAN is an interactive planning and analysis tool developed to assist the Utah Department of Transportation (UDOT) in giving decision-makers access to data to support informed discussions and decisions. UPlan also facilitates synchronizing planning efforts with other state agencies, local governments, federal agencies, utility companies, and within UDOT's many departments. UPlan is an interactive web application that allows stakeholders to access data where they live their lives.

Data is compiled from a variety of sources and displayed spatially on an interactive map allowing users to view potential projects or studies and their adjacent resources. By organizing data in this format, data can be analyzed and displayed as meaningful information. Additional information (i.e. reports) can be linked spatially so all data associated with a project or study can be viewed on a single platform. UPlan has powerful analytical capabilities to allow us to measure environmental impacts in an automated way.

UPlan Concept

The entire premise that drives UPlan development is very simple: organize data in a way that makes it useful to a broad spectrum of users. With that in mind, attention has been focused on the different data silos and combining that data with GIS tool that provides access to that data. A key aspect of this concept is that this information had to be made available to a much broader audience of users than what we currently have with most GIS based products. Our goal was to develop a tool that allowed decision-makers access to that same data that is contained in the data silos, combine it with other data sources,

become more informed with that knowledge, and provide that information in an environment that has 'click on, click off' functionality. This is in contrast to the traditional desktop or server GIS applications that require a high degree of technical competency to access that same data.

With 'click on, click off' access to data, the user base for data contained in the various databases has greatly increased.

Where this all started.....
In mid-2007, UDOT Planning issued a Request for Proposals (RFP) to begin the process of developing a planning 'tool'. The RFP was fairly brief and direct. Essentially, it asked proposers to provide their idea of how to bring data into a GIS environment, organize it in a way that allowed analysis of that data and finally, and perhaps the most important part, deliver a graphical user interface (GUI) that decision-makers could use in their daily quest to better understand how this data could assist in more informed decisions.

Two years later and with a lot of resources expended, we had evaluated different proprietary software packages, tried to modify Google Earth, reviewed what the other 50 states had done and essentially came up empty handed. What we learned is that there are numerous, beneficial products or tools out there that address very specific needs. However, we were looking for a tool that could deliver broad or unlimited spatial display of data and at the same time provide navigation of that data in an organized way. During the spring of 2009, a member of the consulting team presented at a team meeting ArcGIS API loaded up with some data and we viewed that data through the internet.

This was our moment. The dark clouds parted, the sun began to shine through and we could hear the birds singing! Right then and there, we stopped all work on the other exploratory efforts and put all of our efforts into developing this application further.

What we have learned so far.
Now that we had a platform to focus on, we could begin to develop our ideas and populate UPlan with more data and analytical tools. Our world started change and it was a very exciting time.

With the ESRI GIS product combined with Adobe Flex framework, these out of the box, industry standards opened doors for rapid application development. One of the benefits that we immediately recognized is that we now had access to databases in other State Agencies, utility companies, cities, counties and other sources. We could now take data from the sources, load it into UPlan to display and analyze.

We also learned that once we put data into a web application that is easy to navigate and display, that there is a lot of demand for information presented this way. And we learned about an unintended consequence. This tool has repeatedly shown itself as an effective collaboration tool.